

PROCESS FOR R&D PROGRAM DEVELOPMENT: FY 2002 AND LONG-TERM STRATEGIC PLAN FOR FIRE RESEARCH AND DEVELOPMENT

Purpose

The National Fire Plan (NFP) calls for increasing the capability of federal research and development to support efforts to reduce the human and ecological losses from wildfires. Initial allocation of NFP funds in FY 2001 increased fire-related R&D in the US Forest Service by \$26 million per year. Further increases in the base funding have been requested for FY 2002, and a progressive expansion of the R&D capabilities for at least the next five years has been proposed to support the goals outlined in the NFP, the USDA Forest Service Cohesive Strategy for vegetation management, the Forest Service Strategic (GPRA) Plan, and the implementation of the 1995 Interagency Fire Policy.

The USFS R&D leadership group (the "Green Team") at its December 2000 meeting directed the WO research staff and the research stations to develop a long-term strategy for fire research. This strategy would describe an agenda of critically important national R&D needs, and an approach for accomplishing this agenda that would integrate efforts across staff areas, disciplines, research stations, and even agencies. This strategy would guide and justify agency budget requests for FY 2002 and beyond.

What follows is the process through which the WO research staff and stations would develop the research strategy and support the construction of a detailed FY 2002 budget request and allocation.

Objectives:

- 1. Describe high priority research and development needs related to the National Fire Plan and other fire-related policy mandates. This**

assessment of needs would reconcile the needs of fire managers and other stakeholders (users) with gaps in the state of the science and technological development. It would also assess the capability of Forest Service R&D and other research organizations to meet these needs and describe the most important areas for capacity building and program development. --- March 2001

2. Develop a proposed breakdown of funding targets for FY 2002 that would begin to phase in a program of meeting these important needs. --- April 2001

3. Develop a long-term, comprehensive plan for fire research. This plan would consist of an agenda to identify and rank critical research and development gaps as well as a strategic approach for rebuilding R&D capacity and delivering knowledge and technology to the user community --- October 2001

Products

The needs assessment will be based on an integrated assessment of (a) user knowledge and technology needs and (b) science and technology gaps that constraint the fulfillment of user needs. These needs and gaps will be ranked for importance and urgency of delivery. Also addressed will be the capability of the current program (scientific capacity, operating funds, facilities, staff, etc.) to fill these gaps. The assessment will be organized around the Fire Plan key points:

A. Fire fighting capacity

- Ai. Resource Allocation and decision support
- Aii. Predictive models

B. Restoring Landscapes

- Bi. Post-fire treatments
- Bii. Invasives protection

C. Reducing Hazardous Fuels and Fire Risk

- Ci. Assessment
- Cii. Materials use
- Ciii. Treatment effectiveness and effects
- Civ. Ecological Interactions

D. Communities

- **Di. Social and economic systems**
- **Dii. Fire-safe construction**

The program enhancement recommendations will consist of activities proposed to fill important gaps. The program description will describe and categorize expected means of addressing these needs through:

- **Fundamental research**
- **Applied research and/or tool development**
- **Science synthesis and interpretation**
- **Transfer or delivery of existing science and technology products**
- **Administrative studies or monitoring**
- **Integrated packages of the above**

A request for proposed R&D enhancements to begin in FY 2002 will be based on the most highly ranked subset of the assessed needs. The RFP would be used to elicit internal proposals on a competitive basis and/or to negotiate with the research stations in developing program plans. It would be presented as the second phase (FY 2001 was the first) of the long-term strategy and offered in three funding level scenarios - high, medium, and low. It would encourage interunit and interstation collaboration and would complement the base (pre-Fire Plan and FY 2001) program.

Organization

The planning effort will be led by the WO R&D staff in cooperation with the research stations. Participation by staff is voluntary or in some cases assigned by the staff director. The staff will involve the user community through the WO NFS and S&PF staffs and through the WO program coordinators and the regional coordination contacts for the National Fire Plan. This involvement will take place in small work teams for each topic area. A small steering group with representation from each of the FR&D staff areas will manage the process.

Schedule

- Needs assessment - January and February 2001
- FY 2002 program description and RFP - March and April 2001
- FY 2002 program development and allocation - May through August 2001
- Long term research agenda and strategy development - March through September 2001
- Research strategy review and revision - September through December 2001
- FY 2003 program description and RFP - March and April 2002

Participation

Note: These are suggestions only. In most cases individual staff members have not been approached about their involvement. The size and composition of these teams may change according to individual preferences and availability. Staff participation is voluntary, but is critical in developing accurate and complete picture of research needs.

Steering Group: Dave Cleaves and Sue Conard (VMPR); John Sebelius (RVUR); Al Riebau (WFWAR); Brad Smith (SPPII)

Work Teams : rw=research & development Washington office; uw or uf = user community, Washington office or field; rs = research station; ro or uo = research or user other agency. * indicates team leader or co-leader.

Firefighting

Al Riebau (rw- WFWAR) *
 Harry Croft (uw- F&AM)
 Enoch Bell (rs - PSW)
 Anne Hoover (rw - RVUR)

Rehabilitation and Recovery

Doug Ryan (rw - WFWAR) *
 Max Copenhagen (uw -)
 Karen Solari (uw -)
 Tom Peterson (uw -)
 Jim Saveland (rs - RMRS)

Sheila Andrus (rw - VMPR)
Richard Cline (rw - WFWAR)
Sharon Fiedman (rw - VMPR)
Alison Hill (rw - VMPR)
Terry Shaw (rw - VMPR)

Fuels and Fire Risk

John McCarty (rw - WFWAR) *
Dave Sandberg (rs - PNW)
Ritter? (rs - FPL)
(rs - NE)
Marily Buford (rw - VMPR)
Bryce Stokes (rw - VMPR)
Sue Conard (rw - VMPR)
Glen Contreras (rw - WFWAR)
Howard Rosen (rw - RVUR)
Frank Burch (uw - FM)
Patty Hiram (uw - F&AM)
Joe Carbone (uw - EMC)
Leslie Sekavek (uw - F&AM)

Community

John Sebelius (rw - RVUR) *
Ed Dickerhoof (rw - RVUR)
Dave Shriner (rs - NC)
Linda Langner (rw - RVUR)
Karen Mockenhaupt (uw - S&PF)
Janet Anderson-Tyler (uw - F&AM)
Steve Yadoff (uw - S&PF)
Gail Charnley (uw - EMC)
Donna Lamb (uw - NFS)

Tasks

Steering Group

- **___ Coordinate the overall efforts of the work teams.**
- **Convene groups necessary to progress of the planning.**

- Secure resources needed by work teams.
- Represent the planning effort in presentations and negotiations with outside groups, including Congressional briefings and inquiries.
- Coordinate activities and direction with NFP leadership.
- Advise FS R&D leadership on policy and other issues.
- Coordinate with research planning and development in other agencies and universities (USDA, NAPSC, USSGS, NASA, NOAA, etc.).
- Resolve differences and point out integration opportunities among work teams.
- Oversee the review and selection of proposals (FY 2002).
- Oversee the publication and dissemination of Long-term R&D agenda and strategy.

Work Teams

1. Review Cohesive Strategy, National Fire Plan, and proposals (FY 2001); interview users and scientists.
2. Describe and rank problems, associated needs for knowledge or technology to solve these problems, and products needed from research and development. Summarize the expected consequences and contribution to the Fire Plan objectives and GPRA performance elements.
3. Identify linkages with other work teams and possible means of program integration.
4. Assess the capability of the Forest Service R&D organization to address these needs and describe gaps in these capabilities that could be filled with program development funding. Categorize products as: (a) Fundamental research, (b) applied research and/or tool development, (c) science synthesis and interpretation, (d) transfer or delivery of existing science and technology products, (e) administrative studies or monitoring , or (f) integrated packages of the above.
5. Identify potential roles for partners in the R&D process including user community and other R&D organizations such as other agencies, universities, the broader science community.
6. Integrate the research and development needs into a proposed program of work over the next 10 years. Describe planned

products or knowledge development milestones in phases.
Coordinate with the other work teams to minimize duplication
and merge common goals. These program components will
form a long-term agenda and strategy for fire research.

Sources of information

Cohesive Strategy -
National Fire Plan -
Funded FY 2001 proposals
Unfunded FY 2001 proposals
Summary of Fire Directors Research Needs Assessment (8-step
process) (1993)
Others?

Tools

Survey of user information/knowledge needs (form developed by
Cleaves)
FS Manual direction on the development of R&D programs

Task Outline and Schedule

1. Charter planning effort - Deputy Chief -
2. Describe process to Green Team
3. Described process plan to NFP leadership team - Steering
group -
4. Assemble work teams - Teams -
5. Assemble and review material - Teams -
6. Individual teams work through assessment users and science
needs - Teams -
7. Team leader coordination - Team leaders and Steering group -
8. Preliminary needs assessment due - Teams -
9. Work teams meet to compare progress and integrate results -
10. National coordination meeting - FY 2001 units and work teams
-
11. Needs assessment and RFP language due - Work teams
12. Deputy Chief presentation of FY 2002 needs - Deputy Chief
13. Integration of RFP's into a consolidated RFP (FY 2002) -
Steering Group and Work Teams -

- 14. Elicitation of proposals (FY 2002) (or negotiation with stations) - Steering Group and Stations -**
- 15. Submission of proposals (FY 2002) - Stations -**
- 16. Review and selection of proposals (FY 2002) -**
- 17. Allocation recommendation to Deputy Chief (FY 2002) - Steering Group**
- 18. Review and comment on allocation - Stations**
- 19. Final allocation (FY 2002) - Deputy Chief**
- 20. Draft of long term R&D strategy due - Work teams**
- 21. Outside review of long term R&D strategy - Steering group and Fire Plan leadership**
- 22. Revision of strategy - Steering group**
- 23. Final strategy published - Steering group**
- 24. Disseminate and present strategy**